

Amendments to the Specification:

Please replace paragraph [36] on page 9 with the following amended paragraph:

[36] After the phase detector 104 detects the phases of the signals, the complex conjugate number calculator ~~104~~ 106 calculates complex conjugate numbers of the signals in order to control the detected phases of the signals. But, use of the complex conjugate number calculator ~~104~~106 is selective. Therefore, if the phases of the signals outputted from the splitter 103 can be the same without calculating the complex conjugate numbers, the complex conjugate number calculator 106 is not needed. Herein, the complex conjugate number is that if the signal is $1+2i$, the complex conjugate number of the signal becomes $\overline{1+2i}=1-2i$ and can be referred to as a bar.

Please replace paragraph [39] on page 10 with the following amended paragraph:

[39] In the related-art method, because the reference signals which have passed through a splitter are different from each other, the measuring process is performed twice. But in the present invention, the same reference signals are input into the array antenna unit 110, thereby simply performing calibration. Herein, the array antenna unit is considered as one block including an antenna 111, a front-end part 112, an RF transmitter (Rx Tx) 113, ~~an~~ the RF Rx 114 and a baseband processor 115 which are illustrated on the right side of the Figure 3.